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ESTIMATES AND PROJECTIONS OF AFRICAN POPULATION TRENDS

ADDIS ABABA SEPTEMBER 1989

Population Division

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I. INTRODUCTION

Rapid rates of population growth continue to be the major demographic feature of the majority of ECA member States in recent years. The trend, as in the past, is attributable to two main factors: high fertility along with high but declining mortality. Hence, the importance of constant assessment and monitoring of Africa's population levels and trends as well as the perceptions of African Governments about demographic trends.

In this connection, it should be noted that according to the Fifth Inquiry of the United Nations,conducted about 1982, on the perceptions of member States pertaining to the effects of natural increase on development, its acceptability and the desirability of intervention to change rates, about 37 percent considered their population growth rates to be too high, as against 11 percent which viewed theirs to be too low [1]. Among the nineteen countries that wished to achieve a lower natural growth rate, 12 had comprehensive intervention policies with emphasis on morbidity and mortality reductions.

Also from the preliminary results of the Sixth Inquiry of the United Nations conducted between 1987 and 1988, among the 26 ECA member States that provided replies to the question on Governments' views concerning the current sizes of their populations, five or 20 percent (i.e., Burundi, Guinea-Bissau, Liberia, Mauritius and Uganda) expressed satisfaction with their current population sizes [2]. Ten member States or 40 percent (i.e., Algeria, Cape Verde, Comoros, Egypt, Ethiopia, Gambia, Kenya, Sierra Leone, Tunisia and Zimbabwe),were not satisfied with their current population sizes because they were too large. One, Somalia was not satisfied with its current population size because it was too small. Nine or 36 percent (i.e. Burkina Faso, Cameroon, Madagascar, Malawi, Mauritania, Senegal, Swaziland, Tanzania and Zambia) had no official views.

Regarding assessment and monitoring of population trends, it should be noted that the United Nations Population Division at Headquarters, in collaboration with regional commissions and specialized agencies, prepares every two years revised estimates and projections of population and demographic indicators for major world regions and individual countries.

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[1] United Nations, World Population Trends and Policy, 1981 Monitoring Report, Vol. II. Population Policies, Population Studies Series, No. 79. (New York: 1982)

[2] Analysis of the questionnaires at ECA Population Division

The present paper, based on the latest assessment, that of 1988, has two main objectives [3]. It presents in Section II salient results of the 1988 assessment on ECA member States on population sizes, rates of growth; fertility and mortality, age-sex distributions and dependency ratios. In Section III the consequences of rapid population growth on labour supply in ECA member States are explored. Reference should be made to a similar review done in 1987 which was based on the 1986 assessment [4]. This study focused on the status of data collection systems, requirements and availability also highlighted salient demographic indicators of the assessment.

To underline the implications of rapid population growth in ECA Member States as shown by the projections, beginning with this paper an analysis will be done on their expected consequences for various strategic sectors and/or current and future development problems. The focus this time is on the implications of expected rapid growth of the labour force for productive employment creation in ECA member States.[5]

In this connection the Khartoum Declaration urges member States to make greater effort "to provide youth with productive employment opportunities..." [6]

The current and future dimensions of the task member States face in providing productive employment for their growing labour force is formidable, according to a recent assessment by ILO of the unemployment problems in sub-Saharan African countries:

> Unemployment is emerging as a major adjustment on the sub-Saharan labour markets and can no longer be dismissed as an unimportant phenomenon. [7]

This assessment should be considered against the background of expected substantial increases in the labour force of a large number of African countries, a situation that will make the task of providing productive employment to persons who will be entering the labour market within the next few years more difficult.

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[3] United Nations, World Population Prospects, 1988, ST/ESA/SER.A/106 (New York: 1989)

[4] Economic Commission for Africa, "Estimates on Projections of Africa Population Trends as assessed in 1986", ECA/POP-/WP/87/1[2.6(b), (Addis Ababa, 1987)]

[5] Except specifically stated, all the estimates and projections used in this paper are from the medium variant.

[6] International Conference on the Human Dimension of Africa's Economic Recovery and Development, The Khartoum Declaration, Khartoum: United Nations, 1988

[7] ILO, African Employment Report, 1988, (Addis Ababa: Jobs and Skills Programme for Africa (JASPA), 1989

II. MAJOR FINDINGS OF THE 1988 ESTIMATES AND PROJECTIONS

This Section highlights the salient features of the 1988 assessment pertaining to population size and growth as well as fertility, mortality and age structural changes of the member States of the Economic Commission for Africa. As remarked earlier, rapid rates of population growth continue to be the distinguishing demographic characteristic of ECA member States. Table 1 contains major demographic indicators for ECA Sub-regions. (More tables on demographic indicators be found in the Appendix).

A. Population Size and Rate of Growth

The total population of ECA member States as estimated by the medium variant of the United Nations 1988 assessment [5] is 591 million in 1989. The following is the share of this population among the sub-regions - West Africa (33 percent), East/Southern (32 percent), North Africa with only six countries (24 percent) and Central Africa (12 percent).

In recent years the population of a number of African countries has continued to grow at the relatively fast rate of 3 percent per annum. At the sub-regional level, population growth rates are higher in West Africa and East/Southern Africa compared with Central and North Africa.

TABLE 1

Major Demographic Indicators by Sub-region, 1985-89
(medium variant)

Sub-Region	Population 1989 (000)	Crude birth Rate a/	Crude death Rate a/	Infant Mortality Rate a/	Life Expectancy b/	Per Cent annual rate of growth
North Africa	139	38.0	10.7	86	59	2.73
West Africa	193	48.9	16.5	112	49	3.26
Central Africa	70	44.8	16.0	107	50	2.91
East & Southern Africa	189	47.8	17.0	116	50	3.09
Total	591	44.7	14.7	106	51	3.05

a/ per 1000
b/ at birth

Source: United Nations, Population Prospects, 1988 (New York: 1989)

During the period 1985-1990, high average annual population growth rates (that is, 3 percent and above) were recorded in Benin, Cote d'Ivoire, Ghana, Liberia, Niger, Nigeria and Togo in West Africa; in Botswana, Comoros, Kenya, Madagascar, Malawi, Somalia, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe in East/Southern Africa; in Gabon, Rwanda and Zaire in Central Africa; and in Algeria and Libya in North Africa (Table A. 1). It should be noted that average annual population growth rates for the other countries, barring Mauritius and Seychelles, were also high, varying between 2.0 and 2.9 percent during the same period.

These high rates of population growth distinguishes the ECA region from the other world region. For instance,between 1985 and 1990 the average annual growth rates for the world as a whole, Latin America and South Asia (the other region experiencing high population growth) were: 1.73, 2.09 and 2.26 respectively, compared with 3.05 for the ECA region.

Given this pattern of high rate of population growth, an important question is when will deceleration begin in the ECA region. The evidence from the medium variant of the 1988 assessment indicates that population growth rate will stabilize around 3 percent per annum up to the end of the century,before it begins to decelerate, although gradually at the beginning, and at a high level. At these rates of growth the population of ECA member States is expected to cross the one billion mark between 2005 and 2010 (table A.2).

B. Fertility

High population growth in Africa is the result of the combination of two factors: high, almost constant fertility levels and high but falling mortality levels.

Sub-regional crude birth rates (CBRs) for 1985-89 are shown in Table 1. These indicate that barring the North African sub-region, the CBRs for the other sub-regions are relatively high, that is, 45 per thousand and above. This pattern of high fertility is confirmed by examining the total fertility rates (TFRs) given in Table A.1. The evidence shows that the TFRs in 1985-89 were around 6 and above for all the three sub-Saharan sub-regions: West (6.8), East/Southern (6.6) and Central (6.0). The TFR in North Africa, 5.3, was much lower.

These regional figures mask marked country level variations. In North Africa, for example, the relatively low fertility is ascribed to three countries: Egypt, Morocco and especially Tunisia, which all recorded TFRs under 5 in 1985-89. The TFRs in the other countries were: Algeria (6.05), Libya (6.87) and Sudan (6.44), typical of other African countries.

Fertility levels in West Africa, on the other hand, are uniformly high with the TFRs, ranging from 5.18 in Cape Verde to 7.4 in Cote d'Ivoire during 1985-89 (Table A.1). Only one other country - Guinea-Bissau - recorded a TFR under 6. In the remaining countries the TFRs during the same period were between

6.5 to 7.0: e.g., Burkina Faso (6.5), Liberia (6.5), Mali (6.7), Mauritania (6.5), Niger (7.1), Nigeria (7.0) and Sierra Leone (6.5).

In Central Africa there are wide country variations in fertility rates, with the TFRs ranging from 5.0 in Gabon to 8.3 in Rwanda in 1985-90. Zaire the most populous country in this sub-region had a TFR of 6.1 during the same period.

East/Southern Africa also has a diversified fertility pattern, although generally levels are high. At the one end of the spectrum are the two small island countries-Mauritius (1.94) and Seychelles 2.42 - with extremely low TFRs, the lowest in the whole of Africa. At the other end of the spectrum are the majority of countries, with high fertility, including Kenya with a TFR of 8.1 in 1985-89, among the highest in the world. The TFRs were also relatively high in Malawi (7.0), Tanzania (7.1) and Zambia (7.2). Barring Lesotho and Zimbabwe both with TFRs under 6, the range in the remaining countries was 6.2 to 6.9 (Table A.1).

Trends in fertility for the period 1950-55 to 1985-90 are now reviewed. Table 2 presents information on the TFRs for world regions including ECA as well as the ECA sub-regions for the above-mentioned period. The evidence indicates that during the period 1950-55 to 1985-90 the TFRs for the world as a whole and other world regions excepting ECA experienced a secular trend. Specifically, between 1950-55 and 1985-90, the TFR for the world as whole declined from 5.0 to 3.44; in the more developed regions, from 2.84 to 1.90; and in the less developed regions from 6.18 to 3.94. Compared with these appreciable declines, the TFR of the ECA region experienced only an insignificant decline, from 6.64 in 1950-55 to 6.20 in 1985-90 (Table 2).

This decline is largely attributable to the North African sub-region, the only one among the four where a secular decline occurred during the period, from 6.83 in 1950-55 to 5.32 in 1985-90. In the other three sub-regions a slight secular increase took place: in West Africa, from 6.69 to 6.84; in East/Southern Africa, from 6.67 to 6.74 and in Central Africa from 5.92 to 6.03.

C. Mortality

The most distinguishing pattern of sub-regional mortality is the relatively low levels for the North African sub-region compared with the three sub-Saharan African sub-regions. The crude death rates (CDRs) and infant mortality rates (IMRs) for the period 1985-89 were: North Africa, 10.7 and 86; West Africa, 16.5 and 112; Central Africa, 16.0 and 107; and East/Southern Africa, 17.0 and 116.

Table 2. TRENDS IN TOTAL FERTILITY RATES BY REGION AND ECA SUB-REGIONS, 1950/1955-1985/90
(Medium Variant)

	1950-55	1960-65	1970-75	1980-85	1985-90
World Total	5.00	4.97	4.45	3.61	3.44
More Developed Regions	2.84	2.69	2.20	1.93	1.90
Less Developed Regions	6.18	6.08	5.41	4.19	3.92
ECA	6.64	6.74	6.59	6.34	6.20
North Africa	6.83	7.08	6.36	5.78	5.32
West Africa	6.69	6.78	6.91	6.90	6.84
Central Africa	5.92	5.94	6.04	6.09	6.03
East/Southern Africa	6.71	6.85	6.93	6.73	6.74

Source: United Nations, World Population Prospects: 1988 (New York: 1989)

At the country level, in North Africa, barring Sudan's relatively high level-15.8 - the CDRs were all relatively low in 1985-90, ranging from 7.4 in Tunisia to 10.1 for Egypt.

That West Africa is generally a high mortality sub-region is shown by the range of country level CDRs in 1985-89; from 10.3 in Cape Verde to 23.4 in Sierra Leone. Apart from Cote d'Ivoire (14.2), Ghana (13.1), Liberia (13.3) and Togo (14.1), the CDRs in the remaining countries were high, that is, 15 and above.

The CDRs in Central Africa were generally high, that is, over 16 in 1985-89. The exceptional countries with lower CDRs during the same period were Sao Tome (7.9), Zaire (13.9) and Cameroon (15.6).

East/Southern Africa has at the country level, a diversified mortality pattern, although levels are generally high. At the one extreme are a small number of countries with very low mortality. Topping this list are Mauritius and Seychelles, that recorded the lowest mortality levels among ECA member States between 1985 and 1989: CDRs of 5.4 and 5.6 respectively. Other countries with relatively low mortality include Botswana, Kenya, Swaziland and Zimbabwe, with the following CDRs in 1985-89, 11.7, 11.9, 12.5 and 10.2 respectively. At the other extreme are countries with fairly high mortality, such as Angola, Ethiopia, Malawi and Somalia, all with CDRs in 1985-89 equal to or more than 20.

D. Age Composition

Because of their recent past history of high fertility, the populations of ECA Member States are youthful. For instance, the percentages of the population aged under 15 years range in 1989 from 41.2 in the North Africa sub-region to 47.4 in the East/Southern Sub-region (Table A.4). In the three sub-Saharan sub-regions, the percentages are even higher, ranging from 45 to 47.4 percent.

At the country level, in North Africa, the three countries- Egypt, Morocco and Tunisia - that have relatively low fertility levels are the only ones with lower percentages under 15 years: 39.2, 38.3 and 37.4 respectively.

The percentages of the population under [illegible] are generally high, that is, above 40 percent [illegible] countries of West Africa. Among them, those [illegible] percentages are: Cape Verde (39.6), [illegible] Sierra Leone (41.9). The countries with [illegible] percentages include Cote d'Ivoire [illegible] (47.7), Mauritania (47.0) and Niger [illegible]

Similarly, among the countries [illegible] percentages of the population [illegible] whole high. Mauritius [illegible] exceptionally low fertility [illegible] also very low percentages [illegible] the highest fertility [illegible] tage under 15 years [illegible]

regions with relatively high percentages include, Botswana (49.4), Rwanda (48.3) Tanzania (49.2), Zambia (47.7) and Zimbabwe (48.0). In Central Africa, the percentages of the population under 15 years vary from 36.9 (for Gabon) to 45.3 (for Zaire).

As a basis for comparison, it should be pointed that the percentages of the population under 15 years in 1989, for the world, the more developed and less developed regions are: 31, 22 and 35 percent respectively. The weighted percentage for ECA member States, it should be noted during the same period is 46.

Attention is now focussed on the percentages in the age group 15-64, conventionally defined as the working age group (WAG) and the total dependency ratio (TDR). The percentages of the population in the WAGs are also high in Africa, varying from 50 in the West African sub-region to 55 in the North Africa sub-region. At the same time, at the sub-regional level, the evidence shows that the TDRs are also generally high in 1989: North (81) West (100) Central (92) and East/South (99).

At the country level, in the North African, sub-region, where the percentages in the WAGs are high, the range are 58 in Tunisia and 51.7 in Libya. This sub-region has the lowest TDRs, varying from 72 in Tunisia and 93 in Libya. In the West Africa sub-region, the percentages of the population in the WAGs are relatively high in 1989, in Cape Verde (56), Gambia (54), Guinea (53), Guinea Bissau (54), Senegal (53) and Sierra Leone (55), and relatively low in Benin (50), Ghana (50), Liberia (49), Nigeria (49). The TDRs are also generally high in countries in this sub-region, especially, Benin (101), Cote d'Ivoire (96), Ghana (100), Liberia (103), Mali (98), Mauritania (99), Niger (101) and Nigeria (104).

At the country level, in the East/Southern sub-region, the percentages of the population in the WAGs are relatively high in 1989 in Ethiopia (52), Mauritius (65) and Mozambique (53), and relatively low in Kenya (46) and Tanzania (49). At the same time the TDRs are high in Kenya (119), Rwanda (103) Uganda (104), Tanzania (106) Zambia (101) and Zimbabwe (103).

In the Central African sub-region, all countries generally recorded high percentages of their population in the WAGs, with the percentages for Chad (54), Equatorial Guinea (54) and Gabon (57), the highest. Compared with other countries in the sub-Saharan African sub-regions, TDRs are generally low varying from 75 in Gabon to 93 in Zaire.

As a basis for comparison, the percentages of the population in the WAG and the TDRs are in 1989 for all ECA member States 52 and 99 respectively; those for the world 62 and 61, the more developed regions, 67 and 50, and the less developed regions 61 and 65.

III. THE GROWTH OF POPULATION AND LABOUR FORCE IN ECA MEMBER STATES, 1980-2020

This section of the paper will examine the impact of population growth on labour supply in ECA member States, for the period 1980 to 2020. The medium variant of the biennial estimates and projections of the United Nations and the ILO were used for the empirical analysis [8]. The objectives of the analysis are to delineate the consequences of rapid population growth for labour supply and to provide some indication about aspects of the future problems of absorption of labour in African countries. The discussion is presented in two sub-sections. A review of population-labour force linkages in less developed countries (LDCs) is provided in the first sub-section. This is followed by a presentation of empirical evidence on the present and future consequences of rapid population growth for labour supply in African countries.

Ideally, an analysis of labour supply should be complemented by a discussion on labour demand to provide a comprehensive picture of labour absorption problems [9]. Such an assignment is beyond the scope of this present study.

However, recent studies show that unemployment and underemployment have emerged as among the major economic and social problems of African countries within the past few years. In this connection, these studies point to deterioration of the employment situation in the African region in the 1980s compared with the 1970s. Estimates indicate, for example, that the level of open unemployment and underemployment increased in the 1980s compared with the 1970s [10]. These studies also indicate that the problems of unemployment and underemployment are more serious in urban than in rural areas, and in urban areas are more serious for females than for males, and for those aged 15 to 24 than for the other working age groups.

The available evidence also leads to the conclusion that African countries are currently finding it increasingly difficult to absorb their rapidly growing labour force into productive

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[8] United Nations, World Demographic Estimates and Projections, 1950-2025 (New York, 1988).

[9] See, e.g., D.E. Bloom and R. B. Freeman, "The Efforts of Rapid Population Growth on Labor and Employment", Population and Development Review, Vol. 12, No. 3 (September 1986), pp. 381-414.

[10] ILO/Jobs and Skills Programme for Africa (JASPA), African Employment Report, 1988, (Addis Ababa, 1989).

employment [11].The prospects of their doing a better job in the futrue should be assessed against the possibilities of the tripling or sometimes, quadrupling of their labour supply within the next thirty to forty years, as will be later documented, because of rapid population growth. This conclusion should be reviewed in the light of the finding that increases in the labour force especially on such a scale require attendant growth in employment, accumulation of productive skills, enhancement of capital-labour ratios as well as adaptation to a host of other factors like comparative advantage in international trade, household formation, reproduction and population growth [12].

A. Population-labour Force Linkages

The labour force or the economically active population, defined as consisting of "persons who furnish the supply of labour for production of goods and services" [13] is determined by two basic factors: the size of the population, differentiated by sex and age groups and the level of participation of different groups in the labour force [14]. Population size is determined by the components of population change, namely: fertility, mortality and migration; whereas the level of participation of different groups in the labour force is determined by cultural, economic and social factors. This study does not, however, examine the effects of participation rates on labour supply.

The effects of population growth on labour supply, resulting from changes in fertility and mortality along with their impact on age-distribution patterns are usually lagged. Thus, the effect of high fertility, for example, would begin to be felt in the labour force, when the cohort born y years is y+15 or more years old. However, it should be noted that there are subtle differences between the effects of fertility and mortality through their influence on the age distribution. Population growth through fertility will result in immediate impact on the

[11] ILO/Jobs and Skills Programme for Africa (JASPA), The Challenge of Employment and Basic Needs in Africa (Nairobi: Oxford University Press, 1986); and African Employment Report, 1988 (Addis Ababa, Jobs and Skills Programme for Africa(JASPA): 1989).

[12] Paul Demeny, "The World Demographic Situation", in J. Menken (ed.) World Population and US Policy: The Choices Ahead (New York: W. W. Norton and Company, 1986), p. 59.

[13] Guy Standing, "Labor Force," in J. A. Ross (ed.) International Encyclopedia of Population (New York: The Free Press).

[14] Bloom and Freeman, op.cit., and G. M. Farooq, Population and Employment in Developing Countries (Geneva: ILO, 1985).

younger ages only, and in the long run when the cohort born y years ago begins to enter the labour force. In contrast, a mortality decline usually has a less potent impact on age distribution partly because their influence is unevenly distributed among the whole age groups. This results in a steeper age distribution and higher dependency ratio, though less than the outcome of a rise in fertility.

The effects of population growth on labour supply from migration are not lagged but immediate, as migration propensities are usually high for the young working age population. The migration consequences of labour force growth are particularly discernible in urban areas of African countries, whose population increases are attributable to especially rural-to-urban migration. The influx of migrants into urban areas leads to an immediate increase in the urban labour supply. This is in addition to the lagged increases in their population from fertility and mortality. Uneven development and distribution of economic and social facilities between urban and rural areas, as well as unfavorable rural environment have led to rapid migration to urban areas, in particular, the metropolitan cities of African countries in recent years. This tendency of migrants in African countries to increasingly converge on metropolitan cities for employment has resulted in excessive expansion in the urban labour supply, far above the absorptive capacities of these localities.

Another type of movements in some ECA member States that are major immigration and emigration countries - for example, Botswana, Burkina Faso, Cote d'Ivoire, Gambia, Lesotho and Swaziland - which have immediate effects on the supply of labour is international migration. Immigration and emigration have had both short and long-term consequences on the supply of labour in these various countries.

B. Empirical Results

At the outset, a cautionary note on the limitation of the data on estimates or projections of the labour force is in order. Given the existence of subsistence economies in the rural areas as well as a large informal sector in the urban areas, along with other factors, it has proved difficult to adequately measure the labour force in African countries. Thus, the estimates or projections on the labour force given in the paper should be considered as only rough indicators.

1. Regional and Sub-regional Patterns

The results of the empirical analysis on the growth of the population and labour force for Africa and ECA sub-regions for the period 1980 to 2020, with the more and less developed regions used as the basis for the comparison for the effects of slow, moderate and rapid population growth rates, are summarised in Tables 3 to 5. The following significant patterns emerge.

First, is the more rapid rate of growth of both the population and the labour force in Africa, compared with the less and especially the more developed regions. While the rates of growth of the population are under 1 percent per annum between 1980 and 2020 for the more developed regions (MDRs); they are between 2.38 and 2.97 percent and 1.31 and 1.91 percent in Africa and the less developed regions (LDRs) respectively. Also the rates of growth of the labour force are under 1 percent per annum in the more developed regions, within the same period, but are between 2.54 and 2.90 percent in Africa and 1.31 and 2.28 percent in the less developed regions.

Second, the rates of growth of the population and labour force will decelerate in the MDRs and the LDRs in 1990 - 2000. But rates of growth population in Africa will begin decelerating only in 2010-2020 from their high levels, while the rates of growth of the labour force will stabilize at the high plateau of 2.9 per cent per annum during 2010-2020. Third, the rates of growth of the population will surpass the rates of growth of the labour force for the MDRs and LDRs during most of the years between 1980-2020. On the other hand, in Africa, the rates of growth of the population will surpass the rates of growth of the labour force, up to 1990-2000. During 2000-2010, the two rates will be almost equal.

Fourth, significant expansions are expected in the labour force of Africa, and moderate expansions in that of the LDRs, in view of their higher labour force growths rates compared with the MDRs. Specifically, within the two twenty-year intervals, 1980-2000 and 2000-2020, the labour force of Africa will increase by 68 and 78 percent and that of the LDRs by 51 and 34 percent, respectively. Against these levels of expansion are the expected increases of only 13 and 4 percent in the labour force of the MDRs during the same periods.

Relative to sub-regions, the following patterns have been identified. All four African sub-regions will be experiencing fairly rapid population growth during 1980-2020, with the annual growth rates for East/South and West Africa higher than those for Central and especially North Africa. In this connection, note should be taken of the finding that population growth rates in North Africa are expected to begin decelerating in 1990 - 2000- whereas in the East/South and West Africa sub-regions, population growth rates will accelerate between 1980 - 2000 at relatively high levels, that is, from 3.17 to 3.30 percent and 3.19 to 3.34 percent respectively, before deceleration begins from 2000 to 2010.

Also, the growth rates of the labour force are uniformly high in all four sub-regions, given their past history of high fertility and high but declining mortality. During the two twenty-year intervals, 1980-2000 and 2000-2010, the following percentage increases in the different sub-regions are expected: East/South: 66 and 79; West: 68 and 85; and Central 50 and 79; and North: 80 and 65 respectively.

Table 3: Growth Rate of Population and Labour Force, More and Less Developed Regions, Africa and ECA Sub-regions, 1980 - 2020

Area	1980-1990			1990-2000			2000-2010			2010-2020		
	lab	pop	pop-lab	lab	pop	pop-lab	lab	pop	pop-lab	lab	pop	pop-lab
MDRs	0.62	0.78	0.16	0.54	0.49	-0.05	0.42	0.34	-0.08	0.34	.01	-.33
LDRs	1.98	2.28	0.30	1.83	1.84	0.01	1.55	1.61	0.06	1.31	1.31	0
Africa	2.97	2.54	-0.43	3.01	2.71	-0.30	2.84	2.90	0.06	2.38	2.90	0.52
East/South Africa	3.17	2.45	-0.72	3.30	2.69	-0.61	3.15	2.88	-0.27	2.61	2.90	0.29
Central Afriaca	2.78	2.40	-0.78	2.93	2.33	-0.60	2.82	2.70	-0.12	2.35	3.00	0.65
North Africa	2.62	2.93	0.31	2.27	3.00	0.73	1.84	2.86	1.02	1.48	2.10	0.62
Western Africa	3.19	2.45	-0.74	3.34	2.71	-0.63	3.22	3.02	-0.20	2.70	3.19	0.49

Note: lab= % growth rate labour force; pop=% growth rate population

Source of basic data: United Nations, World Demographic Estimates and Projections, 1950 - 2025 (New York; 1989)

Table 4: Growth of Labour Force of the More and Less Developed Regions and Africa, 1980 -2020

(Thousands)

Area	1980	1990	2000	2021	2020
Africa -	179,299	229,813	301,293	402,804	536,756
East/South Africa	67,790	86,642	113,386	151,265	202,166
Central Africa	21,645	26,428	33,374	43,698	58,930
North Africa	29,823	40,016	53,973	71,841	88,597
Western Afriaca	60,041	76,726	100,560	136,000	187,063
More Developed Regions	541,843	585,509	614,782	635,969	635,562
Less Developed Regions	1,415,531	1,778.038	2,137,741	2,510,837	3,862.769

Source: United Nations, World Demographic Estimates and Projections 1950-2025 (New York: 1989)

Table 5: Absolute and Percentage Changes and Annual Rate of Growth (r) of the Labour Force of the More and Less Developed Regions and Africa, 1980-2020

(in Millions)

Area	1980-1990			1990-2000			2000-2010			2010-2020		
	No.	%	r	No.	%	r	No.	%	r	No.	%	r
MDR	44	8	0.78	29	5	0.49	2.	3	0.34	a	a	-
LDR	363	26	2.28	360	20	1.84	373	15	1.61	351	14	1.3
Africa	51	28	2.54	71	31	2.71	102	34	2.90	134	33	2.9
East/South Africa	19	28	2.45	27	31	2.69	38	34	2.88	51	34	2.9
Central Africa	5	22	2.00	7	26	2.33	10	31	2.70	15	35	3.0
North Africa	10	34	2.93	14	35	3.00	18	33	2.86	17	23	2.0
Western Africa	17	28	2.45	24	31	2.71	35	35	3.02	51	38	3.0

Source: Computed from table 2

a/ insignifant and negative.

Finally, the basic difference in the pattern of sub-regional growth rates of the population and the labour force is that between North Africa and the other sub-Saharan sub-regions Whereas the growth rates of the labour force are higher than those of the populations between 1980 to 2020 in North Africa, the growth rates of the population are higher than those of the labour force between 1980-2010 in the rest of the sub-regions.

The results of the analysis done on the growth of the working age population, defined as the population aged 15 to 64, are next reviewed (tables 6 and 7). This cohort constitutes the entire labour supply, including various groups that participate and do not participate in the labour force. Hence, the objective of this review is only to provide a rough indicator of labour force growth and absorption. The pertinent information are summarized in Tables 6 and 7.

These show that the rates of growth of this population sub-group during 1980 to 2020 are below 1 percent for the MDRs, but between 3.00 and 3.24 percent for Africa, and 1.52 and 2.66 percent for the LDRs. At these rates of growth, the working age population of Africa is expected to increase by 250 percent, from 233 to 808 million and that of the LDRs by 125 percent between 1980 and 2020. On the other hand, the working age population of the MDRs is expected to increase by only 19 percent, from 744 to 882 million, during the same period.

Relative to sub-regions, East/South Africa and West Africa would experience nearly four-fold increases in their working age population, compared with almost three-fold increases in North Africa, and slightly over three-fold in Central Africa.

The rates of growth of the working age population for the sub-regions, barring North Africa, will be accelerating rather than decelerating for most of 1980 to 2020. By 2010 - 2020, the rates will be over 3 percent in all: East/South (3.44); West (3.52) and Central (3.10). In contrast, the growth rates of the working age population for North Africa will decelerate from 2.96 percent per annum in 1980 - 1990 to 1.92 percent during 2010 - 2020. The comparable rates for the LDRs are: 2.66 percent per annum in 1980-1990 and 1.52 per cent in 2010 - 2020.

As indicated earlier, the population in the working age is the potential labour supply of a country. As a rough indicator of the supply of labour, however, the above analysis has clearly shown that because of the youthful age profiles of African countries, they have built-in potentials for explosive growth of their labour force, now and in the immediate future.

Table 6: Working - Age Population, More and Less Developed Regions and Africa 1980 - 2020 (Thousand)

Area	1980	1990	2000	2010	2020
MDRs	744,447	805,135	841,559	876,298	882,167
LDRs	1,875,487	2,447,249	3,010,376	3,640,563	4,236,890
Africa	232,473	313,660	427,978	591,966	807,530
East/South Africa	74,225	100,200	138,875	196,462	277,194
Central Africa	27,592	35,830	47,822	65,235	88,968
North Africa	57,498	77,295	103,496	134,436	162,864
Western Africa	73,158	99,345	137,-85	195,833	278,584

Source: See table 3

Table 7: Absolute (in thousands) and Percentage Changes and Annual Rate of Growth (r) of the Working Age Population, More and Less Developed Regions and Africa, 1980-2020.

Area	1980-1990			1990-2000			2000-2010			2010-2020		
	%	No.	r	%	No.	r	%	No.	r	%	No.	r
MDRs	8.2	60,688	0.78	4.5	36,424	0.44	4.1	34,739	0.4	0.7	5,869	.07
LDRs	30.5	571,762	2.66	23.0	563,127	2.07	20.9	630,187	1.9	14.1	596,327	1.52
Africa	34.9	81,187	3.00	36.4	114,318	3.11	38.3	163,988	3.24	36.4	215,564	3.11
East/ South	35.0	25,975	3.00	38.6	38,675	3.26	41.5	57,587	3.47	41.1	80,732	3.44
Central	29.8	8,228	2.61	33.5	12,002	2.89	36.4	17,418	3.11	36.4	23,733	3.10
North Africa	34.4	19,797	2.96	33.8	26,201	2.92	29.9	30,940	2.62	21.1	28,420	1.92
West Africa	35.8	26,187	3.06	38.7	38,440	3.27	42.1	58,048	3.52	42.2	82,671	3.52

Source: Computed from table 4

2. Country Level Patterns

The above analysis has highlighted aggregate, that is, regional and sub-regional patterns of the impact of population growth on labour supply. One important difference delineated of the impact of population and labour supply growth is between the North African sub-region, where rates of population and labour force growth are relatively lower and the rest of the ECA sub-regions, where they are higher. In order to further explore differences between population and labour force growth in Africa, we now examine country level patterns. To this end, selected number of countries have been classified, by their rates of population growth, into four categories: low growth, medium growth, high growth and very high growth (see Table 8). The major patterns that emerge from the analysis are summarized below.

First, is the relatively low and decelerating population growth rates of the low and medium growth countries, Mauritius and Tunisia (Tables 8, 9 and 10). Thus, although these two countries had initial comparable labour force growth rates with the other selected African countries, both, especially Mauritius, will experience appreciable deceleration in their rates during 1980 to 2020. In contrast, Central African Republic and Sierra Leone, with lower initial labour growth rates would by 2010 - 2020 have higher rates due to their relatively higher population growth rates. Second, is the very high labour force growth rates, that is, between 3.1 and 3.5 percent, expected in the very high growth countries in 2010 - 2020. Third, while in the two low and medium growth countries, Mauritius and Tunisia, the growth rates of the labour force surpass the growth rates of the population for most of 1980 and 2020, the opposite is the case for the high and very high growth countries from 1980 to 2010.

Finally, are the expected increases in the labour force within the period, 1980 to 2020 (Tables 8, 9 and 10). The notable difference is that between the very high growth countries and the rest of the selected countries. In the former, the labour force is expected to increase between three-fold (in Zaire) and four-fold (in Kenya), compared with expansions of between two-fold and two and half in the latter. However, secular increases in the labour force, would be experienced by all selected countries, given their high fertility. In this context, it should be noted, for example, that despite a deceleration in its labour force growth rate by the end of the period, Tunisia is expected to undergo an expansion of 156 percent in its labour force, from 1980 thousand in 1980 to 4894 thousand in 2020, compared with expansions of 118 and 97 percent in Central African Republic and Sierra Leone, respectively.

Table 8: Growth Rate of Population and Labour Force, Selected ECA Member States 1980-2020

	1980-1990			1990-2000			2000-2010			2010-2020		
	lab	pop	pop-lab	lab	pop	pop-lab	lab	pop	pop-lab	lab	pop	pop-lab
Low Growth												
Mauritius	1.78	2.8	1.02	1.30	1.9	0.60	1.04	1.4	0.36	0.80	0.5	-0.30
Medium												
Tunisia	2.11	3.1	0.99	1.77	2.6	0.83	1.41	2.2	0.79	1.18	1.4	0.22
High Growth												
Central Africa Rep.	2.35	1.4	-0.95	2.54	1.9	-0.64	2.45	2.2	-0.25	2.01	2.4	0.39
Sierra Leone	1.90	1.2	-0.65	2.04	1.5	-0.54	2.02	1.9	-0.12	1.61	2.2	0.59
Very High Growth												
Cote d'Ivoire	3.55	2.6	-0.95	3.17	2.5	-0.67	2.98	2.9	-0.08	2.35	3.1	0.75
Kenya	4.16	3.5	-0.66	4.16	3.6	-0.56	3.71	3.7	-0.01	2.84	3.5	0.66
Nigeria	3.42	2.7	-0.72	3.57	2.9	-0.67	3.40	3.2	-0.20	2.83	3.4	0.57
Zaire	2.99	2.3	-0.69	3.12	2.6	-0/52	2.97	2.9	-0.07	2.43	3.2	0.77

Note=lab=% growth rate labour force; pop=% growth rate population

Source of basic data: United Nations, World Demographic Estimates and Projections op. cit.

Table 9: Labour Force of Selected ECA Member States 1980-2020

(Thousand)

Country	1980	1990	2000	2010	2020
Low Growth					
Mauritius	331	440	531	608	641
Medium					
Tunisia	1908	2592	3378	4243	4894
High Growth					
Central Africa Rep.	1200	1384	1665	2067	2619
Sierra Leone	1278	1438	1674	2027	2526
Very High Growth					
Cote d'Ivoire	3547	4599	5920	7916	10891
Kenya	7072	10011	14417	20884	29689
Nigeria	32087	41857	55943	76990	108856
Zaire	10434	13084	16888	22605	31097

Source: United Nations World Demographic Estimates and Projections op. cit.

Table 10: Absolute and Percentage Changes and Annual Rate of Growth of Labour Force of Selected ECA Member States, 1980-2020

Country	1980-1990			1990-2000			2000-2010			2010-2020		
	%	No.(000)	r	%	No.(000)	r	%	No.(000)	r	%	No.(000)	r
Low Growth												
Mauritius	33	109	2.8	21	91	1.9	15	77	1.4	6	33	0.5
Medium Growth												
Tunisia	36	686	3.1	30	784	2.6	26	865	2.2	15	651	1.4
High Growth												
Central African Rep.	15	184	1.4	20	281	1.9	24	402	2.2	27	252	2.4
Sierra Leone	13	160	1.2	16	236	1.5	21	353	1.9	25	499	2.2
Very High Growth												
Cote d'Ivoire	20	1052	2.6	29	1321	2.5	34	1996	2.9	38	2975	3.1
Kenya	42	2939	3.5	44	4406	3.6	45	6467	3.7	42	8805	3.5
Nigeria	30	9770	2.7	33	14086	2.9	38	21047	3.2	40	30866	3.4
Zaire	25	2650	2.3	29	3804	2.6	34	5717	2.9	38	8492	3.2

Source: Computed from Table 7.

IV. SUMMARY AND CONCLUSIONS

Discernible changes are occurring in the way ECA member States are perceiving the consequences of population [15]. This trend became particularly noticeable since the adoption of the Kilimanjaro Programme of Action on Population in 1984, with the 1987-88 Sixth United Nations Inquiry, confirming the results of past inquiries. In the context of changing perception about population factors in social and economic development in Africa in recent years, the periodic assessment of population trends, the main objective of the paper, serves an important function.

The present paper based on the latest assessment of estimates and projections, that of 1988, as with the previous review,[16] shows that rapid rates of population growth continue to be the distinguishing characteristic of the majority of ECA member States. The evidence also indicates that the causes of this high population growth rate, estimated as 3 per cent per annum during the period 1985-89 for the ECA region are: high, almost constant fertility levels and high but falling mortality levels. As a result, the population of the majority of ECA member States are youthful, with an estimated 46 under age 15 in 1989.

The implications of this rapid rate of populations growth and the resulting youthful age distribution for past and future labour supply in ECA member States were reviewed. The conclusion of the analysis is that past, current and future regimes of high population growth rates in African countries have resulted and will result in significant increases in the labour force. According to the medium variant assessment of the United Nations and the ILO, the labour force for Africa as a whole is expected to increase from 179 million in 1980 to 537 million in 2020. That this three-fold expansion of the labour force within forty years is the outcome of high fertility and falling mortality rates can be assessed by making comparison with the more developed regions, whose population growth within the same period will be under 1 percent per annum. Here, only moderate increases in the labour force are expected, from 541 million in 1980 to 635 within in 2020, that is, an increase of only 17 percent. Second, given the lagged effects involved in the increase of the labour force, Africa's share, excluding the North Africa sub-region, is expected to still expand by substantial amount after the 2020s, even with th the deceleration in population growth rates. Third, the country level analysis shows that in countries such as Cote d'Ivoire, Kenya, Nigeria and Zaire that are experiencing very high population growth, between three-

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[15] I.I. Ekanem, "African Population Policies: Formulation and Implementation During the 1970s and 1980s": and F.T. Sai," Key Issues and Problems in African Population Policy in the 1990s", in IUSSP,African Population Conference, Dakar 1988,Volume 3, (Liege: 1988)

[16] ECA, ECA/POP/WP/87/1[2.6(b)], op.cit.

fold to four-fold increases are expected in their labour force within the period 1980 to 2020. Fourth, is the implications of increases in population growth rates surpassing labour force growth rates, a feature of all sub-regions barring North Africa up to 2010. This scenario puts excessive pressure on these countries for the institution of reforms leading to equiping their much expanded labour force with the needed skills and know-how as well as institution of reforms in technology increases in capital per worker if economic recessions is to be averted.

Table A.1

Selected Demographic Indicators for ECA Member States:
1988 Assessement (Medium Variant)

Sub-region/ Country	Mid-year Pop (000) 1989	r(%) 1985-90	CBR 1985-90	CDR 1985-90	TFR 1985-90	eo 1985-90	IMR 1985-90
NORTHERN AFRICA	138,734	2.73	38.0	10.7	-	-	-
Algeria	24,597	3.12	40.2	9.1	6.05	62.5	74
Egypt	52,757	2.55	36.0	10.1	4.82	60.6	85
Libyan Arab Jamahariya	4,385	3.65	43.9	9.4	6.87	60.7	82
Morocco	24,521	2.56	35.3	9.7	4.82	60.7	82
Sudan	24,484	2.88	35.3	9.7	6.44	49.8	108
Tunisia	7,990	2.36	30.3	7.4	4.10	65.3	59
WESTERN AFRICA	193,055	3.26	48.9	16.5	-	-	-
Benin	4,592	3.15	50.5	19.0	7.00	46.5	110
Burkina Faso	8,763	2.67	47.2	18.5	6.50	47.2	138
Cape Verde	368	2.81	38.4	10.3	5.18	61.0	66
Cote d'Ivoire	12,097	4.12	50.9	14.2	7.41	52.5	96
Gambia	835	2.83	46.8	21.3	6.39	43.0	143
Ghana	14,566	3.14	44.3	13.1	6.39	54.0	90
Guinea	6,705	2.48	46.6	21.9	6.19	42.2	147
Guinea Bissau	966	2.08	40.8	20.0	5.38	45.0	132
Liberia	2,473	3.18	45.0	13.3	6.50	54.5	87
Mali	9,088	2.94	50.1	20.8	6.70	44.0	169
Mauritania	1,969	2.73	46.2	19.0	6.50	46.0	127
Niger	6,894	3.01	50.9	20.9	7.10	44.5	135
Nigeria	109,135	3.43	49.8	15.6	7.00	50.5	105
Senegal	7,171	2.69	45.7	18.9	6.39	45.8	128
Sierra Leone	4,046	2.49	48.2	23.4	6.50	41.0	154
Togo	3,347	3.09	44.9	14.1	6.09	53.0	94
CENTRAL AFRICA	70,083	2.91	44.8	16.0	-	-	-
Burundi	5,297	2.88	45.7	17.0	6.31	49.0	112
Cameroon	10,954	2.60	41.6	15.6	5.79	51.0	94
Central African Rep.	2,841	2.46	44.3	19.7	5.89	45.5	132
Chad	5,538	2.47	44.2	19.5	5.89	45.5	132
Congo	1,940	2.73	44.4	17.2	5.99	48.3	73
Equ. Guinea	430	2.34	42.4	19.0	5.66	46.5	127
Gabon	1,132	3.45	38.8	16.4	4.99	51.5	103
Rwanda	6,989	3.40	51.0	17.1	8.29	48.5	122

Table A. 1 continued

Selected Demographical Indicators for ECA Member States:

1988 Assessement (Medium Variant)

Subregion/ Country	Mid-year Pop(000) 1989	r(%) 1985-90	CBR 1985-90	CDR 1985-90	TFR 1985-90	eo 1985-90	IMR 1985-90
Sao Tome & Principe	109	2.78	43.7	7.0	6.62	66.3	42
Zaire	34,853	3.17	45.6	13.9	6.09	52.5	98
EAST AND SOUTHERN AFRICA	189,368	3.09	47.8	17.0	-	-	-
Angola	9,747	2.70	47.2	20.2	6.39	44.5	137
Botswana	1,241	3.51	47.3	11.7	6.25	58.5	67
Comoros	503	3.11	45.6	14.5	6.19	52.0	80
Djibouti	394	2.96	47.3	17.7	6.60	47.0	122
Ethiopia	45,687	2.50	43.7	23.6	6.15	41.0	154
Kenya	24,097	4.22	53.9	11.9	8.12	58.4	72
Lesotho	1,724	2.85	40.8	12.4	5.79	55.9	100
Madagascar	11,602	3.18	45.7	14.0	6.60	53.5	120
Malawi	8,151	3.31	53.0	20.0	7.00	47.0	150
Mauritius	1,090	1.25	18.5	5.4	1.94	69.0	23
Mozambique	15,248	2.65	45.0	18.5	6.39	46.5	141
Seychelles	68	1.72	22.8	5.6	2.42	71.2	14
Somalia	7,339	3.32	50.8	20.2	6.60	45.0	132
Swaziland	763	3.48	46.8	12.5	6.50	55.5	118
Tanzania	26,343	3.67	50.5	14.0	7.10	53.0	106
Uganda	17,804	3.49	50.1	15.4	6.90	51.0	103
Zambia	8,148	3.76	51.2	13.7	7.20	53.4	80
Zimbabwe	9,419	3.15	41.7	10.2	5.79	58.3	72

Source: United Nations, World Population Prospects: 1988 New York, 1989

Note: r = growth rate
CBR = crude birth rate
CDR = crude death rate
TFR = total fertility rate
eo = life expectancy at birth
IMR = infant mortality rate.

Table A. 2

POPULATION OF ECA MEMBER STATES, 1990 and 2025
Medium Variant

(Thousand)

Sub-region/Country	1990	2025
EAST/SOUTHERN AFRICA	198,074	531,990
Botswana	1,285	3,364
Burundi	5,451	13,100
Comoros	519	1,323
Djibouti	406	1,070
Ethiopia	46,743	112,269
Kenya	25,130	77,616
Lesotho	1,774	4,272
Madagascar	11,980	32,984
Malawi	8,428	22,804
Mauritius	1,103	1,480
Mozambique	15,663	34,368
Rwanda	7,232	18,079
Seychelles	69	84
Somalia	7,555	18,903
Swaziland	789	2,206
Uganda	18,442	55,198
U. R. Tanzania	27,328	84,784
Zambia	8,456	25,466
Zimbabwe	9,721	22,621
CENTRAL AFRICA	69,564	179,645
Angola	10,020	24,731
Cameroon	11,245	26,178
Central African Rep.	2,913	6,815
Chad	5,678	13,245
Congo	1,994	4,964
Equatorial Guinea	440	991
Gabon	1,171	2,927
Sao Tome & Principe	112	284
Zaire	35,990	99,512
NORTH AFRICA	142,471	274,658
Algeria	25,364	50,591
Egypt	54,059	93,976
Libya A. J.	4,544	12,846
Morocco	25,139	44,362
Sudan	25,195	59,594
Tunisia	8,169	13,284

Table A. 2 (continued)

POPULATION OF ECA MEMBER STATES, 1990 and 2025
Medium Variant

(Thousand)

Sub-region/Country	1990	2025
WESTERN AFRICA	199,504	525,252
Benin	4,741	12,987
Burkina Faso	9,007	22,678
Cape Verde	379	886
Cote d'Ivoire	12,596	39,842
Gambia	858	1,850
Ghana	15,020	37,031
Ghinea	6,876	15,710
Guinea Bissau	987	2,165
Liberia	2,554	7,241
Mali	9,362	24,142
Mauritania	2,024	4,962
Niger	7,109	18,940
Nigeria	113,016	301,312
Senegal	7,369	16,364
Sierra Leone	4,151	9,641
Togo	3,455	9,500
TOTAL AFRICA	609,613	1,311,545

Source: United Nations, World Population prospects: 1988

(New York: 1989)

Table A. 3

Population by age groups, 0-14, 15-64 and 65 and Total
Age Dependency Ratio, 1989 and 2025
ECA Member States

Sub-region/Country	1989				2025			
	0-14	15-64	65+	TDR	0-14	15-64	65+	TDR
EASTERN AFRICA	47.2	50.2	2.6	99.1	37.4	59.4	3.3	68.4
Botswana	49.4	48.5	2.1	106.1	39.0	57.8	3.1	72.9
Burundi	45.6	51.1	3.3	95.7	30.3	65.5	4.2	52.6
Comoros	46.0	51.1	2.9	95.6	26.3	69.0	4.8	45.0
Djibouti	45.3	52.0	2.7	92.1	-	-	-	-
Ethiopia	45.3	52.0	2.6	92.1	37.6	59.0	3.4	69.5
Kenya	52.6	45.6	1.8	119.3	37.3	60.1	2.6	66.4
Lesotho	42.6	53.8	3.6	85.8	33.1	62.3	4.6	60.5
Madagascar	44.8	51.8	3.4	93.1	34.7	61.4	3.9	62.8
Malawi	46.1	51.3	2.7	95.0	36.3	60.0	3.7	66.6
Mauritius	30.9	65.1	4.0	53.6	21.2	67.7	11.0	47.6
Mozambique	43.3	53.4	3.3	87.3	34.1	61.9	4.0	41.6
Rwanda	48.3	49.2	2.5	103.2	37.3	59.7	3.0	67.4
Seychelles	23.8	71.8	4.4	67.4	-	-	-	-
Somalia	45.3	51.7	3.0	93.5	37.5	59.1	3.4	69.2
Swaziland	46.4	50.6	3.0	97.8	38.4	58.2	3.4	71.7
Uganda	48.5	49.0	2.5	104.3	39.0	58.0	3.0	72.5
U. R. Tanzania	49.2	48.5	2.3	106.2	39.0	58.1	2.9	72.1
Zambia	47.7	49.7	2.7	101.4	39.1	57.1	3.2	73.2
Zimbabwe	48.0	49.2	2.7	103.1	39.0	57.7	3.3	73.3
CENTRAL AFRICA	44.5	52.2	3.3	91.5	35.5	60.6	3.9	65.1
Angola	44.8	52.1	3.0	91.9	37.6	58.9	3.4	69.7
Cameroon	44.0	52.2	3.9	91.7	34.6	61.1	4.3	63.7
Central African Rep.	43.2	53.0	3.8	88.8	33.9	62.0	4.1	61.3
Chad	42.8	53.6	3.6	86.5	34.0	61.8	4.1	61.7
Congo	44.0	52.7	3.4	89.9	34.8	61.2	4.0	63.4
Equatorial Guinea	42.0	53.9	4.1	85.4	34.0	61.6	4.4	62.4
Gabon	36.9	57.0	6.0	75.3	33.5	60.9	5.6	64.2
Sao Tome & Principe								
Zaire	45.3	51.7	2.9	93.3	35.6	60.5	3.8	65.3

Table A. 3 (continued)

Sub-region/Country	1989				2025			
	0-14	15-64	65+	TDR	0-14	15-64	65+	TDR
NORTH AFRICA	41.2	55.2	3.6	81.1	26.3	67.1	6.6	48.9
Algeria	44.6	52.0	3.4	92.1	25.6	68.7	5.7	45.6
Egypt	39.2	56.8	4.0	75.9	24.4	67.8	7.8	47.6
Libya A. J.	45.8	51.7	2.4	93.3	32.2	63.2	4.5	58.1
Morocco	38.3	58.0	3.7	72.4	23.3	68.9	7.9	45.2
Sudan	45.1	52.0	2.9	92.3	31.7	63.8	4.5	56.7
Tunisia	37.4	58.2	4.4	71.8	23.2	69.2	7.6	44.5
WEST AFRICA	47.4	50.0	2.6	100.0	38.1	58.8	3.1	70.2
Benin	47.5	49.7	2.8	101.0	37.6	59.3	3.1	68.5
Burkina Faso	44.1	52.9	2.9	88.9	37.3	59.1	3.6	69.3
Cape Verde	39.6	56.3	4.1	77.7	24.9	70.0	5.1	42.8
Cote d'Ivoire	46.1	50.9	2.9	96.4	34.7	61.5	3.8	62.6
Gambia	43.1	54.0	3.0	85.3	36.4	60.0	3.7	66.7
Ghana	47.1	50.1	2.8	99.6	38.7	58.0	3.3	72.3
Guinea	43.6	53.4	3.0	87.3	36.5	59.7	3.7	67.4
Guinea Bissau	41.3	54.4	4.3	83.8	34.6	60.9	4.5	64.3
Liberia	47.7	49.3	3.0	102.9	39.0	57.9	3.1	72.8
Mali	46.6	50.6	2.7	97.5	38.0	58.9	3.1	69.9
Mauritania	47.0	50.3	2.8	99.0	38.1	58.7	3.2	70.3
Niger	47.3	49.9	2.8	100.5	38.0	58.9	3.1	69.8
Nigeria	48.6	49.0	2.4	104.2	38.8	58.3	2.9	71.5
Senegal	44.6	52.5	3.0	90.6	36.8	59.6	3.6	67.9
Sierra Leone	41.9	55.1	3.0	81.6	33.1	62.7	4.1	59.4
Togo	45.3	51.5	3.2	94.2	35.5	60.7	3.8	64.8
Total ECA	45.6	51.5	2.9	99.3	34.8	47.2	4.0	64.1

TDR = Total dependency ratio both sexes

Source: United Nations, World Population Prospects, 1984
New York: 1986.